

# PROPOSAL

Presented To:

**Derwick Associates**

for

**7EA Liquid Fuel Conversion**

*Prepared By*



Proposal No. 409-2956

December 7, 2009

**This document is privileged and contains confidential information intended for use only by  
Derwick.**

---

## Table of Contents

|            |  |          |
|------------|--|----------|
| <b>1.0</b> | <b><i>Introduction</i></b>                     | <b>3</b> |
| <b>2.0</b> | <b><i>Work Scope</i></b>                       | <b>3</b> |
| <b>3.0</b> | <b><i>Assumptions &amp; Clarifications</i></b> | <b>4</b> |
| <b>4.0</b> | <b><i>Pricing</i></b>                          | <b>5</b> |
| <b>5.0</b> | <b><i>Terms &amp; Conditions</i></b>           | <b>5</b> |
| <b>6.0</b> | <b><i>Follow Up</i></b>                        | <b>5</b> |
| <b>7.0</b> | <b><i>Acceptance</i></b>                       | <b>6</b> |

## **1.0 Introduction**

ProEnergy Services (“ProEnergy”) is pleased to provide this proposal to Derwick Associates (“Derwick”) for Liquid Fuel Modification of a GE 7EA gas only turbine for your project located in Venezuela.

## **2.0 Work Scope**

The scope of work described below will be performed to modify a GE 7EA Gas Only unit to dual fuel (gas fuel and distillate fuel) capabilities. The modification will be a turn key package and will include engineering, procurement, and supply of the components, equipment, materials, consumables, software, controls logic, and drawings required to incorporate these systems on the existing gas only units. Below is a general list of the scope of supply:

### **Liquid Fuel System:**

- Fuel Forwarding Skid
- Fuel stop valve
- Fuel bypass / control valve
- Main fuel pump with solenoid clutch and shaft coupling
- Duplex fuel filters with transfer valve
- Flow divider
- Liquid Fuel Solenoid valve
- Fuel purge valves
- Tubing, piping and supports
- Instrumentation

### **Combustion System**

- Primary and Secondary dual fuel nozzles

### **Water Injection System**

- Water Injection Skid equipped with pump and VFD, filter system, motor starters, control valves, and instrumentation
- Tubing, piping, and supports

### **Atomizing Air System**

- Atomizing air heat exchanger
- Air filter / separator
- Booster compressor – motor driven
- Main compressor – accessory gear driven
- AOV's and check valves
- Instrumentation
- Piping, tubing, and supports

#### Purge Air System

- Heat Exchanger
- AOV's
- Check valves
- Piping, tubing, and supports
- Instrumentation

#### Controls / Electrical / Instrumentation

- Logic, set points, and hardware for control system
- Conduit, cable, junction boxes

#### Documentation

- Equipment assembly drawings and instructions
- Installation drawings (for construction contractor)

#### Field Assembly

- Accessory base - Assembly of the components, piping, tubing, conduit, wire, and supports associated with the liquid fuel and supporting systems.
- Turbine base - Assembly of the components, piping, tubing, conduit, wire, and supports associated with the liquid fuel and supporting systems.
- Supply of components and materials (piping, tubing, conduit, wire, supports, etc.) for field assembly (outside of the accessory and turbine bases) to interconnect systems.
- On site labor (craftsmen, supervision, and technical direction), tools, equipment, and direction to assembly components and material on the accessory and turbine bases.

### **3.0 Assumptions & Clarifications**

The following assumptions have been made in the preparation of this proposal:

- All costs to commission or start-up the equipment will be performed on a time and material basis.
- All cost to store or maintain equipment or materials at site is not included in the scope of work.
- All cost associated with interfaces to the turbine is not included in this scope of work. This includes conduit, cable, piping, foundations, or any special requirements associated with the water injection and fuel forwarding skids. A separate proposal will be provided after a site evaluation is performed to determine material and installation requirements. (this is done because the location of the skids relative to the unit has not been determined)
- Shipping and packaging costs are included in the scope of work. However any taxes, duties, or other costs associated with importing this equipment is not included.

- Equipment details required to design the foundations of the liquid fuel and water injection skid and BOP interfaces (piping and electrical) will be forwarded to the customer. Any engineering support required to assist with the design will be at the standard time and material rates.
- It is assumed that spare breakers are available in the GE supplied MCC for the AA booster compressor and Water Injection Pump / Motor & skid.
- It is assumed that the customer will provide breakers for the fuel forwarding skid pump / motors.
- There is no fuel treatment equipment included in the scope of work.
- It is assumed that there is sufficient spare I/O points and card existing in the GT control system.

#### **4.0 Pricing**

ProEnergy will perform the scope of work identified above for a price of **\$3,705,475.00 per unit**.

#### **5.0 Terms & Conditions**

This proposal shall be valid for thirty (30) days; provided, however, the obligation to treat this proposal as confidential, and that it cannot be shared with any third party without the prior written consent of ProEnergy shall survive.

This proposal, and any resulting contract or agreement, shall be subject to the terms and conditions mutually agreed upon between ProEnergy and Derwick.

#### **6.0 Follow Up**

Please contact the following person at ProEnergy for information regarding this proposal:

Joaquin Mavares, Director of International Sales

[jmavares@proenergyservices.com](mailto:jmavares@proenergyservices.com)

Office: 660.829.5100

Cell: 713.992.1790

Fax: 660.829.1160



---

## 7.0 Acceptance

Please return a signed and dated copy of this proposal along with a Purchase Order number to confirm acceptance of this proposal.

---

*ProEnergy Services LLC*

By: \_\_\_\_\_

Printed Name: Sherri Meyer \_\_\_\_\_

Title: Proposal Manager \_\_\_\_\_

Date: \_\_\_\_\_

---

*Derwick Associates*

By: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_